

12. (Previously Presented) A computer system, comprising a decoder according to Claim 10, and further comprising:

at least one hard disk, and

at least one means for reading said hard disk.

13. (Previously Presented) Non-removable data storage means, comprising computer program code instructions for the execution of the steps of a method according to Claims 1 or 2.

14. (Previously Presented) Partially or wholly removable data storage means, comprising computer program code instructions for the execution of the steps of a method according to Claims 1 or 2.

(Currently Amended)
15. ~~(Previously Presented)~~ A computer-readable medium storing computer

executable code for program, containing instructions such that, when said program controls
a programmable data processing device, said instructions lead to said data processing
device implementing a method according to Claims 1 or 2 of decoding a one-point
algebraic geometric code of dimension k and length n , wherein, in order to identify a
position of errors in a received word, a syndromes matrix S , of size $(n - k) \times (n - k)$, is
defined, of which elements S_{ij} of each line i are calculated, for j between 1 and $w(i)$,
wherein boundary w is a decreasing function, using syndrome s of the received word,